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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,379	01/22/2001	Bertram Gunzelmann	GR 98 P 8060 P	2354
24131	7590	07/27/2004	EXAMINER	
LERNER AND GREENBERG, PA P O BOX 2480 HOLLYWOOD, FL 33022-2480			AHN, SAM K	
			ART UNIT	PAPER NUMBER
			2637	10

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/767,379

Applicant(s)

GUNZELMANN ET AL.

Examiner

Sam K. Ahn

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on amendment, 5/6/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1-5 are objected to because of the following informalities:

In claim 1, line 3, delete "a binary-coded" and insert "a received binary-coded".

In claim 1, line 6, delete "the correlation" and insert "the correlating step".

In claim 1, lines 8 and 9, delete "the received spread sequence" and insert "the received binary-coded spread sequence".

In claim 1, line 11, delete "the sections" and insert "the k sections".

In claim 1, lines 11-12, delete "the stored received spread sequence" and insert "the stored received binary-coded spread sequence".

In claim 1, line 12, delete "corresponding sections" and insert "corresponding k sections".

In claim 1, line 13, delete "sequence." and insert "sequence, wherein m, k and f are integers greater than one".

In claim 2, line 3, delete "the stored received spread sequence" and insert "the stored received binary-coded spread sequence".

In claim 2, line 4, delete "the respective" and insert "a respective".

In claim 2, line 7, delete "a section" and insert "the first section".

In claim 2, line 8, delete "a least" and insert "the least".

In claim 2, line 14, delete "further".

In claim 4, line 4, delete "content" and insert "a content".

In claim 4, line 20, "the received spread sequence" and insert "the received binary-coded spread sequence".

In claim 4, lines 21 and 24, delete "the stored received spread sequence" and insert "the stored received binary-coded spread sequence".

Claim 5 directly depends on claim 4.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Freidin et al. (Freidin) in view of Mukherjee.

Regarding claim 1, Freidin teaches a communications acquisition method, which comprises correlating a received binary-coded spread sequence arriving at a frequency  $f$  and having  $m$  bits with a locally generated spread sequence having  $m$  bits, the locally generated spread sequence having  $k$  sections, the correlating step comprising the following steps: storing the received binary-coded spread sequence (101 in Fig.2), splitting the stored received binary-coded spread sequence into  $k$  sections (by splitting the sequence into  $n$  sections in 101), and correlating (105) the  $k$  sections of the stored received binary-coded spread

sequence at a frequency with corresponding sections of the locally generated spread sequence (103). (note col.2, line 9 – col.4, line 44)

However, Freidin does not explicitly teach wherein the correlating step is taken place at a frequency of  $k*f$ , wherein the specification discloses oversampling the received sequences. Mukherjee teaches oversampling the received sequence (see 44C in Fig.4), wherein it is well-known in the art that oversampling by twice the sampling rate meets the Nyquist rate. Therefore, it would have been obvious to one skilled in the art at the time of the invention to oversample the received sequences at a frequency of  $k*f$ , wherein Freidin may have  $k$  sections of divided sequences oversampled at the rate of  $k$  times the frequency  $f$  for the purpose of meeting and exceeding Nyquist rate theorem.

#### ***Allowable Subject Matter***

3. Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and overcome the claim objections.
4. Claims 4 and 5 would be allowable if rewritten or amended to overcome the claim objections, set forth in this Office action.
5. The following is a statement of reasons for the indication of allowable subject matter:  
Present application discloses method and apparatus of a communications acquisition wherein the receiver comprises a shift register coupled to a memory

device wherein the memory device divides a received spread sequence into 32 sections wherein each section has 32 bits. The received sequences are correlated with a known spread sequence. Closest prior art Freidin teaches all subject matter claimed, however, Freidin does not teach wherein a shift register receiving the received sequence is coupled to the memory and dividing the sequences into 32 sections. Therefore, prior arts solely or in combination does not teach or suggest all subject matter claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Sam Ahn** whose telephone number is **(703) 305-0754**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Jay Patel**, can be reached at **(703) 308-7728**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, VA 22313-1450

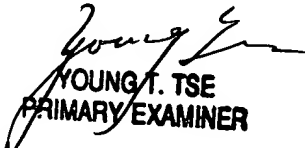
**or faxed to:**

**(703) 872-9306**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Sam K. Ahn  
7/20/04

  
**YOUNG T. TSE**  
**PRIMARY EXAMINER**